THE CITY OF DULUTH MINNESOTA

Erosion and Sediment Control Application and Permit

(Required For Land Disturbance of 3,000 sq ft or greater**)
(See City of Duluth UDC Article 2, Section 50-18.1.E) Revised April 2014

SITE LOCATION	
Site Address:	Date:
Lot: Plat & Parcel:	
Nature of Project	
Est. Start Date: Est. Completion Date:	

OWNER / CONTRACTOR			
Property Owners Name			Telephone No.
Address	City	State	Zip
Contractors Name			Telephone No.
Address	City	State	Zip

CITY USE ONLY			
City Engineer Approval:			Date:
Permit Number:	Permit Fee:	**$150**	**$300**

SEE REVERSE SIDE FOR FEE SCHEDULE AND ADDITIONAL REQUIREMENTS
(Attach the Erosion and Sediment Control Plan (ESCP) to this application page)

MS-4 Statement of Compliance (not for permanent stormwater management)
The property owner and the contractor conducting work on the site are responsible for all the construction activities that occur on the site. By signing this permit both parties are required to install and maintain all erosion and sediment control BMPs to ensure that sediment, soil and debris does not leave the construction site. This includes but is not limited to tracking of soil /mud onto public streets and roadways from vehicles leaving the site, soil eroding from the site onto roadways or drainage ditches or onto neighboring property. If sediment, soil/mud and/or debris leaves the site, both parties are responsible for the immediate clean up and all costs and fines associated with it. Both parties are also responsible for the total restoration of vegetation on the site (seed/mulch, sod, gardens…) after construction disturbance is substantially complete, and only after vegetation has been established with vigorous growth can BMPs be cleaned and removed.

	/	/
Property Owner	Telephone #	Date
	/	/
Contractor	Telephone #	Date

EROSION CONTROL PERMIT FEES

Size of Project* (*****)	Erosion and Sediment Control Plan / SWPPP ***	Erosion and Sediment Control Permit	FEE
Land Disturbance Area less than 3,000 s.f.**	Specific plan not required, but must follow BMPs	No	No Fee
Land Disturbance Area greater than 3,000 s.f. and less than 10,000 s.f.	Yes	Yes	$150
Land Disturbance Area greater than 10,000 s.f. and less than 1 acre.	Yes	Yes	$300
Land Disturbance Area equal to or greater than 1 acre.	Yes	Yes ****	N/A

* All projects regardless of area disturbed, will be inspected for compliance with Erosion and Sediment Control Best Management Practices (BMPs), see attached .

** If city engineer determines that the proposed development is in a vulnerable area (steep slopes, erodible soils, adjacent to sensitive areas, etc.) and may cause degradation of the waters connected to the City's storm water system, then the provisions applicable to land disturbance areas between 3,000 and 10,000 sq. ft. shall apply.

*** A site specific Storm Water Pollution Prevention Plan (SWPPP) meeting MPCA NPDES Permit requirements for Construction Activity is required and shall be submitted to the City for review. An individual one-family or two-family residence (that is not part of a common plan of development) with less than 10,000 sq. ft. of disturbance and less than 7,500 sq. ft. of new impervious area does not have to prepare a SWPPP, but shall submit an erosion control plan meeting the requirements of this document and attachments.

**** The MPCA Permit No. MN R 100001 is required (General Permit Authorization to Discharge Stormwater Associated with Construction Activity under the National Pollutant Discharge Elimination), and a copy of permit to be submitted to City. See this page for internet link.

***** Please see the City of Duluth UDC Article Two, Section 50-18.1.E to determine if the proposed project is required to meet permanent stormwater quality and rate control requirements and applicable fees.

NOTE: For projects disturbing one acre or more, the MPCA Stormwater Permit for Construction Activitity must be completed--not the City of Duluth's form.
www.pca.state.mn.us/water/stormwater/stormwater-c.html

The entire MS4 Permit may also be found at the MPCA: website:
www.pca.state.mn.us/water/stormwater/stormwater-ms4.html#requirements

City of Duluth Erosion and Sediment Control Plan Guidelines

Erosion and Sediment Control Plan (ESCP)

The Permit Application should be filled out and the Erosion and Sediment Control Plan should be prepared as follows:

- Complete the attached Narrative form Item No. 1, or use a separate sheet. Fill in **all** areas as completely as possible.
- Complete a Site Map / Plan showing the items listed below in item No. 2 and see Elements of Erosion Control Plan, Site Map Requirements for further guidance to address specific item for each plan. Additionally see example site map / plan.
- Incomplete Narratives or Site Map / Plans will be returned for additional information and will delay permit approval.

Erosion and Sediment Control Methods

Control of sediment is required so that it does not migrate to an adjoining property, roadway, catch basin, or a wetland/watercourse. Diagrams are attached that depict some of the control methods commonly used for erosion and sediment control. Silt fence barriers and crushed rock temporary entrances are common control methods that can be effective for small projects. Additional methods, such as sediment traps and detention structures, are required for some projects and a qualified professional may need to specify the appropriate erosion and sediment control methods. See attached sheet titled Commonly Used Erosion Controls.

Activities Exempt from the Ordinance

Minor land disturbing activities are exempt such as: home gardens, landscaping, repairs and maintenance work, utility work, certain septic tank work, fencing, tilling, planting, or harvesting of agricultural, horticultural, or silviculture crops, and certain emergency repairs.

City Erosion/Sediment Control Permit Narrative -rev 2011

*These are the **absolute minimum** submittal requirements for **all projects**:*

(1) NARRATIVE

A) Provide a description of what you are doing and type foundation/disturbance.
(e.g., constructing a 2,000 sq ft house w/full basement; constructing an attached 24x24 garage on slab; building a 20x15 house addition on frost footings, etc.)

B) How much land are you disturbing? **Total:_____ square feet**
Main soil type? _____ Are you importing/exporting any fill? ____ Amount_____

C) Describe the slope of the land **and** the slope of the adjacent land.

D) Describe all temporary erosion control devices you intend to use and show on an attached drawing ***where*** and ***when*** you will be installing them. [**At a MINIMUM, you must have** perimeter control such as silt fence and washed rock construction entrance.] ***Also, show and protect all stockpiles.***

E) Final Stabilization. Date you will sod, or seed & mulch, or otherwise establish vegetation on the disturbed area.
Method:_____ Target Date:_____
If site is not vegetated by October 30th, describe below your selected winter-over methods (mulch, erosion blanket, etc.).

(2) DRAWING

A) • **Always *clearly* show** the site grading/disturbance limits.
• Also, show *pre-* **and** *post-*development drainage arrows.

B) ***Clearly show*** estimated land contours (hand drawn is acceptable for small projects).

C) **Show** any/all creeks, ditches, wetlands, or other sensitive areas *within 200 feet* of your site.
• **If none, so state:** _____

D) ***Clearly* show** the amount and placement of silt fence, hay bales, construction entrance, etc.

E) ***Clearly* show** washed rock construction entrance. [*Minimum*: 12' W x 50' L x 6" deep] **OR** show mud mat reusable mat - *8' x 45' minimum* (see Brock White handout).

F) • **Show** and label streets and adjacent properties.
• **Show** catch basins/inlets.
• ***Clearly* show** all protective measures for those areas where sediment could migrate. Protect your neighbor's property from your construction activity and potential erosion and sediment.

****For Large Projects, Commercial Projects, Complex Projects –
Additional information and design are required - refer to City Ordinance 9365****

Technical assistance: engineering 730-5200; [Gary Minck 730-5074 / Tom Johnson 730-5103]

GENERAL NOTES FOR EROSION CONTROL

STRAW BALES or SILT FENCE

*Put up before any other work is done
*Install on downslope side(s) of site with ends extended up sideslopes a short distance
*Place parallel to the contour of the land
to allow water to pond behind the fence
*Entrench 4 inches deep (see diagram)
*Stake (every 3 feet minimum)
*Leave no gaps/ overlap if necessary
*Inspect often and maintain
*Remove sediment when deposits reach half way up fence or bale

ROCK CONSTRUCTION ENTRANCE

*Install a single construction access using large crushed rock (1 ½ " to 2 ½ ") to prevent tracking of soils off project site
*Put rock 6 inches deep, 12 feet wide, 50 feet long
* Maintain rock access through project end
*All vehicles to use rock entrance

SEDIMENT CLEANUP

* By the end of each work day, sweep/scrape up soil tracked on roads, alley , sidewalk
* After a storm clean up soil washed off site onto sidewalks, streets, alleys.

REVEGETATION

*Seed & mulch, sod or mulch disturbed area as soon as project is completed

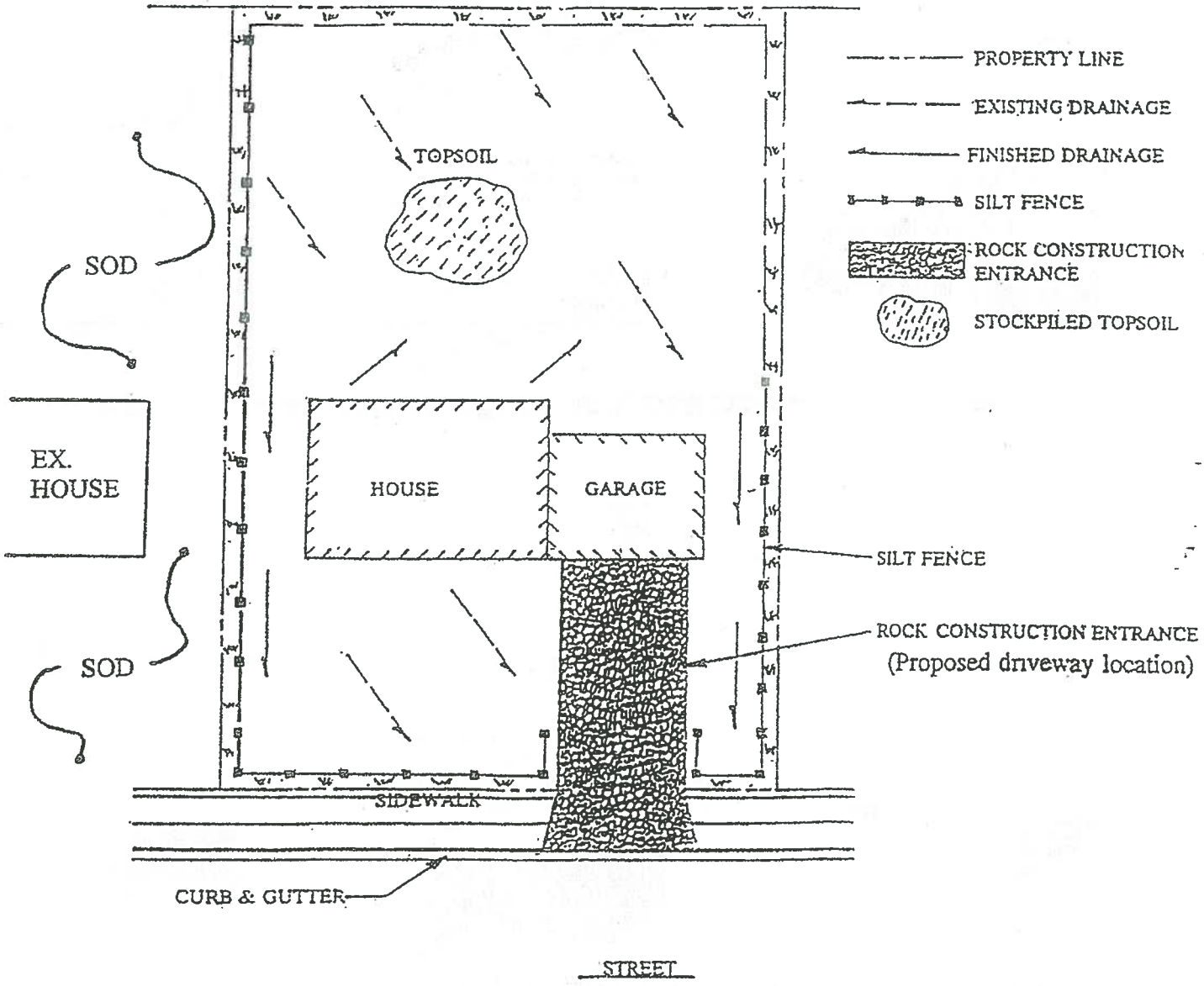
PRESERVING EXISTING VEGETATION

*Preserve existing trees, shrubs, sod, as much as possible

WARNING! Extra measures may be needed if your site:
*Has highly erodible soils
*Is within 200 feet of a river or stream
*Is within 1,000 feet of a lake
*Is steeply sloped
*Receives runoff from adjacent land

For more information on appropriate measures for your site, please call the City of Duluth Engineering Division at 730-5200.

Erosion Control Practices for Small Sites



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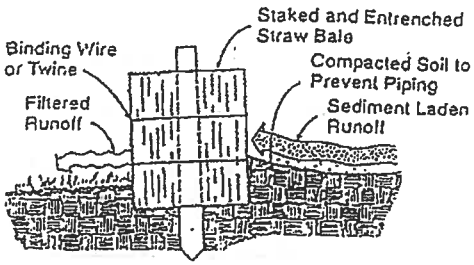
Commonly Used Erosion Controls

Straw Bale Fences

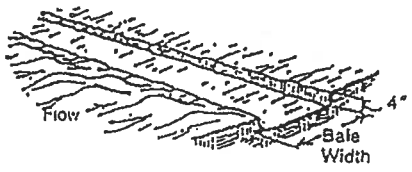
Figure 1—Cross Section of Straw Bale Installation



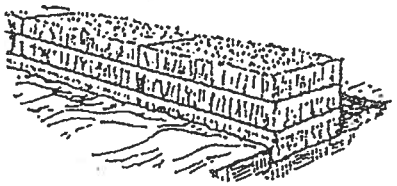
Source: Michigan Soil Erosion and Sedimentation Control Guidebook, 1975.

Figure 2—How to Install a Straw Bale Fence

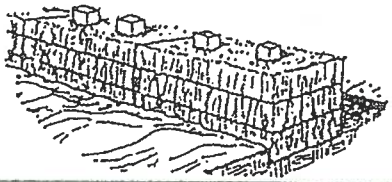
1. Excavate a 4" deep trench.



2. Place bales in trench with bindings around sides away from the ground. Leave no gaps between bales.



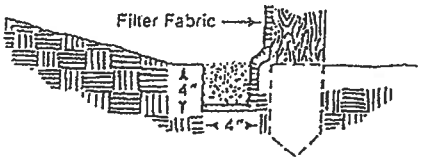
3. Anchor bales using two steel rebars or 2" x 2" wood stakes per bale. Drive stakes into the ground at least 8".



4. Backfill and compact the excavated soil.

Silt Fences

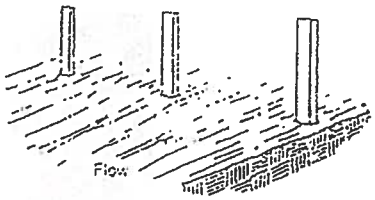
Figure 3—Cross Sections of Trenches for Silt Fences



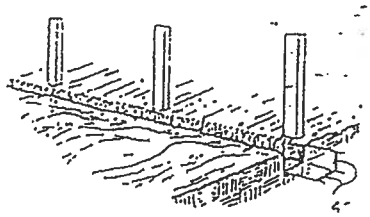
ource: North Carolina Erosion and ediment Control Planning and Design anual, 1988.

Figure 4—How to Install a Silt Fence

1. Set stakes no more than 3 ft. apart and drive them into the ground at least 8".

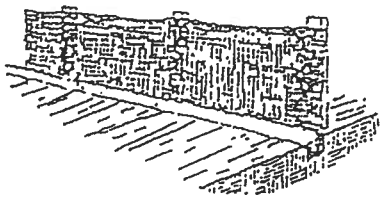


2. Excavate a 4" x 4" trench upslope along the line of stakes.

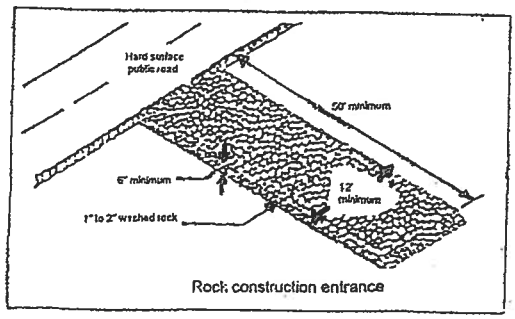


3. Staple filter material on upslope side of stakes and extend it into the trench. When joints are necessary, overlap material between two stakes and fasten securely.

4. Backfill and compact the excavated soil.



Rock Construction Entrance



Rock construction entrance

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ELEMENTS OF EROSION & SEDIMENT CONTROL PLAN (ESCP)

ESCP Project Narrative

(1) Project description

(2) Phasing of construction

(3) Existing site conditions

(4) Adjacent areas affected by project

(5) Critical areas identified

(6) Erosion and sediment control measures

(7) Soil descriptions

(8) Permanent stabilization methods

(9) Stormwater management considerations

(10) Maintenance schedule for erosion and sediment measures

(11) Calculations

(12) Additional information required by the city engineer

Criteria to be considered in the ESCP

(1) Stabilization of denuded areas and soil stockpiles

(2) Establishment of permanent vegetation

(3) Protection of adjacent properties

(4) Timing and stabilization of sediment trapping measures

(5) Use of sediment basins

(6) Cut and fill slopes

(7) Stormwater management criteria for controlling off site erosion

(8) Stabilization of waterways and outlets

(9) Stormwater management criteria for controlling off site erosion

(10) Working in or crossing water bodies

(11) Underground utility construction

(12) Construction access routes

(13) Disposition of temporary erosion and sediment control measures

(14) Maintenance of erosion and sediment control practice

Site Map Requirements

(1) Location Map

(2) North Arrow

(3) Scale (1 inch = 100 ft. or greater detail)

(4) Benchmark

(5) Existing contours at two ft. intervals, 200 ft. beyond boundary - show watercourses/wetlands

(6) Final contours

(7) Existing vegetation - trees, shrubs, grasses

(8) Soil boundaries

(9) Property boundary and lot lines

(10) Elevations and grades - street grades, pond elevations, etc.

(11) Drainage arrows

(12) Critical erosion areas

(13) Clearing and grubbing limits

(14) Utility plans

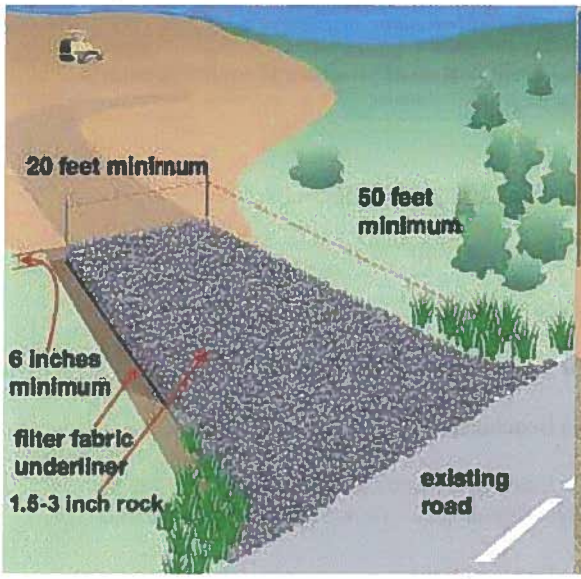
(15) Location of erosion and sedimentation control practices - basins, swales, silt fence, bales

(16) Location of other practices

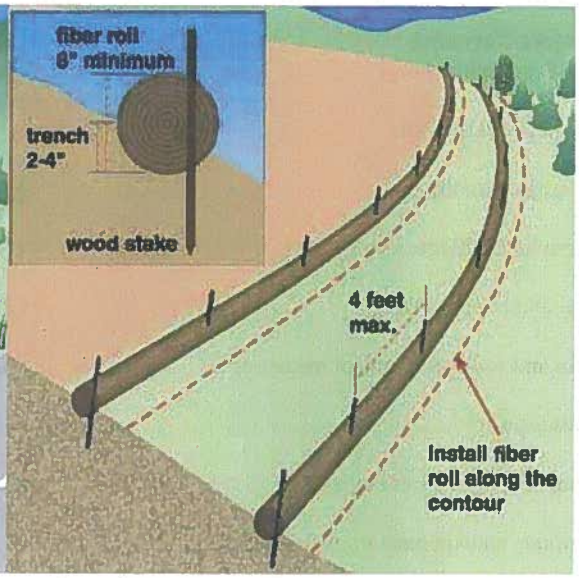
(17) Plan preparer's signature, address and phone number

(18) Responsible party name, address, and phone number

(19) Delineation of applicable zoning boundaries



Rock Construction Entrance



Perimeter Control – Bio Rolls